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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/474,147      12/29/99      BREED

D      ATI-214

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PM82/0427

EXAMINER
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ARTHUR, G

ART UNIT	PAPER NUMBER
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3661  
DATE MAILED:

04/27/01

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/474,147

Applicant(s)

BREED ET AL.

Examiner

Gertrude Arthur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 December 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11-12.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. Claim 1, 5, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 the limitation a vehicle including a system is unclear.

In claim 5, the phrase "the seat portion of the seat" is unclear.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 24, 28, 31-33, 49, 66-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Corrado et al. (U.S. Patent No. 5,482,314).

As to claims 1, 31, 49, 66, Corrado et al. disclose a vehicle system for determining the occupancy state of a seat in the vehicle and comprising a plurality of

transducers (24, 26) as shown in Fig. 14 wherein each transducers providing data relating to the occupancy state of the seat. It also discloses a processor (74,77,82) as shown in Fig. 14 for receiving the data from the transducers and processing the data to obtain an output indicative of the current occupancy state of the seat, the processor comprises an algorithm created from a plurality of data sets each of the data sets representing a different occupancy state of the seat See Fig. 14 ( ex: empty seat, child seat). The algorithm producing the output indicative of the current occupancy state of the seat upon inputting a data set representing the current occupancy state of the seat and being formed from data from the transducers (See abstract, lines 11-14).

As to claims 2, 24, 67, Corrado et al. disclose the algorithm is a pattern recognition algorithm (See col. 6, lines 21-25).

As to claims 3, 32, 68-69, Corrado et al. disclose a processor 82 that accepts a separate stream of data from each transducers and the data from the transducers is passed to the processor means without combining with another stream of data.

As to claim 4, Corrado et al. disclose a processor means 74 that is arranged to process separate data independent of processing of the other streams of data as shown in Fig. 14.

As to claim 28, Corrado et al. disclose a control means 86 coupled to the processor 84 as shown in Fig. 14 for controlling a component or device in the vehicle in consideration of the output indicative of the current occupancy state of the seat obtained from the processor.

As to claim 33, Corrado et al. disclose a weight sensor arranged in the seat (See abstract)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 6-23, 25, 29-30, 34-48, 50-65, are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrado et al. (U.S. Patent No. 5,482,314) in view of Breed et al. (U.S. Patent No. 6,081,757).

As to claim 5, Corrado et al. disclose all but fail to specifically disclose that the transducers is a reclining angle detecting sensor for detecting a tilt angle of the seat between a back portion of the seat and a seat portion of the seat. In an analogous art, Breed et al. disclose a seated state detecting apparatus wherein it discloses the seated state comprise a reclining angle detecting sensor (See col., lines). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Corrado et al. with that of Breed et al. by having a transducer that has a reclining angle detecting sensor for detecting a tilt angle of the seat between a back portion of the seat and a seat portion of the seat in order to evaluate the seated state of a passenger or driver seat.

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As to claims 6-23, 25, 29-30, 34-48, 50-65, Corrado et al. disclose all but fail to specifically disclose a second ultrasonic, third and fourth ultrasonic sensors and neural network and weight sensors. In an analogous art, Breed et al. disclose in Fig. 3, ultrasonic sensors 11, 12, 13, 14, neural network 25, weight sensor 6. It further discloses that the detecting unit for determining the occupancy of a seat in a passenger compartment of a vehicle including wave transmitting sensors such as ultrasonic sensors for transmitting waves (See abstract, lines 1-9). it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Corrado et al. with that of Breed et al. in order to evaluate the seated state of a passenger or driver seat.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Breed et al. (U.S. Patent No. 6,078,854) disclose an apparatus and method for adjusting a vehicle component.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur whose telephone number is (703) 308-7564. The examiner can normally be reached on 8:30 a.m-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (703) 308-3873. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

GA

*GA*

April 24, 2001

*Gertrude Arthur*  
GERTRUDE ARTHUR  
PATENT EXAMINER